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* * * * * * * * * * Welcome to STN International * * * * * * * * * *

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NEWS 3	OCT 06	Increase your retrieval consistency with new formats or for Taiwanese application numbers in CA/CAplus.
NEWS 4	OCT 21	CA/CAplus kind code changes for Chinese patents increase consistency, save time
NEWS 5	OCT 22	New version of STN Viewer preserves custom highlighting of terms when patent documents are saved in .rtf format
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NEWS 7	NOV 03	New format for Korean patent application numbers in CA/CAplus increases consistency, saves time.
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NEWS 10	NOV 22	Higher System Limits Increase the Power of STN Substance-Based Searching
NEWS 11	NOV 24	Search an additional 46,850 records with MEDLINE backfile extension to 1946
NEWS 12	DEC 14	New PNK Field Allows More Precise Crossover among STN Patent Databases
NEWS 13	DEC 18	ReaxysFile available on STN
NEWS 14	DEC 21	CAS Learning Solutions -- a new online training experience
NEWS 15	DEC 22	Value-Added Indexing Improves Access to World Traditional Medicine Patents in CAplus
NEWS 16	JAN 24	The new and enhanced DPCI file on STN has been released
NEWS 17	JAN 26	Improved Timeliness of CAS Indexing Adds Value to USPATFULL and USPAT2 Chemistry Patents
NEWS 18	JAN 26	Updated MeSH vocabulary, new structured abstracts, and other enhancements improve searching in STN reload of MEDLINE
NEWS 19	JAN 28	CABA will be updated weekly
NEWS 20	FEB 23	PCTFULL file on STN completely reloaded
NEWS 21	FEB 23	STN AnaVist Test Projects Now Available for Qualified Customers
NEWS 22	FEB 25	LPCI will be replaced by LDPCI

NEWS EXPRESS 17 DECEMBER 2010 CURRENT WINDOWS VERSION IS V8.4.2 .1,

AND CURRENT DISCOVER FILE IS DATED 24 JANUARY 2011.

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* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011

=> file registry
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FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
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STRUCTURE FILE UPDATES: 2 MAR 2011 HIGHEST RN 1265968-43-1
DICTIONARY FILE UPDATES: 2 MAR 2011 HIGHEST RN 1265968-43-1

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http://www.cas.org/support/stngen/stndoc/properties.html

=> e 9,11,10,12-conjugated linoleic acid/cn
E1 1 9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2 1 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3 0 --> 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
E4 1 9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDIBENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5 1 9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDIBENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN

```
E6              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7              1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
                      OLINE/CN
E8              1     9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9              1     9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10             1     9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11             1     9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12             1     9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11 (or 10,12)-octadecadienoic acid methyl ester/cn
E1              1     9,10C-(IMINOETHANO)-10CH-BENZOFURO(4,3,2-IJK)(2)BENZAZEPINE,
                       4A,5,6,7,8,8A,9,10-OCTAHYDRO-, (4AR,8AR,9R,10CS)-/CN
E2              1     9,10C-(IMINOETHANO)-10CH-BENZOFURO(4,3,2-IJK)(2)BENZAZEPINE,
                       4A,5,6,7,8,8A,9,10-OCTAHYDRO-, (4AR-(4AA,8AA,9.
                      ALPHA.,10CA))-/CN
E3              0 --> 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
E4              1     9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1
                      1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-/CN
E5              1     9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1
                      1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E6              1     9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E7              1     9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E8              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E9              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E10             1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E11             1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
                      OLINE/CN
E12             1     9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN

=> e 9,11,10,12-octadecadienoic acid/cn
E1              1     9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2              1     9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3              0 --> 9,11,10,12-OCTADECADIENOIC ACID/CN
E4              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E6              1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                      BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7              1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
                      OLINE/CN
E8              1     9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9              1     9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10             1     9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11             1     9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12             1     9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11-octadeca-10,12-dienoic acid/cn
E1              1     9,11-OCTACOSANEDIOL, 3-METHOXY-4-METHYL-/CN
E2              1     9,11-OCTACOSANEDIONE/CN
E3              0 --> 9,11-OCTADECA-10,12-DIENOIC ACID/CN
E4              1     9,11-OCTADECADIEN-1-AMINE/CN
E5              1     9,11-OCTADECADIEN-1-AMINE, (9Z,11Z)-/CN
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E6            1     9,11-OCTADECADIEN-1-AMINE, (Z,Z)-/CN
E7            1     9,11-OCTADECADIEN-1-OL/CN
E8            1     9,11-OCTADECADIEN-1-OL, (9E,11E)-/CN
E9            1     9,11-OCTADECADIEN-1-OL, (9Z,11E)-/CN
E10           1     9,11-OCTADECADIEN-1-OL, (9Z,11Z)-/CN
E11           1     9,11-OCTADECADIEN-1-OL, (E,Z)-/CN
E12           1     9,11-OCTADECADIEN-1-OL, (Z,Z)-/CN

=> e 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E1            1     9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1
                    1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E2            1     9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E3            1 --> 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E4            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E6            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7            1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
                    OLINE/CN
E8            1     9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9            1     9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10           1     9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11           1     9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12           1     9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11(or 10,12)-octadecadienoic acid methyl esther/cn
E1            1     9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E2            1     9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E3            0 --> 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
E4            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E6            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7            1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
                    OLINE/CN
E8            1     9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9            1     9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10           1     9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11           1     9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12           1     9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> e 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E1            1     9,11(1H)-CHRYSOFLUORENEDIONE, 2,3,4,6,6A,6B,7,8,10,10A,11A,1
                    1B-DODECAHYDRO-3-HYDROXY-10,11B-DIMETHYL-, ACETATE/CN
E2            1     9,11(OR 10,12)-OCTADECADIENOIC ACID/CN
E3            1 --> 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E4            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM CHLORIDE/CN
E5            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM HYDROXIDE/CN
E6            1     9,11,12,13,13A,14-HEXAHYDRO-2,3,6,7-TETRAMETHOXY-10-METHYLDI
                    BENZO(F,H)PYRROLO(1,2-B)ISOQUINOLINIUM IODIDE/CN
E7            1     9,11,12,13,13A,14-HEXAHYDRODIBENZO(F,H)PYRROLO(1,2-B)ISOQUIN
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                    OLINE/CN
E8          1       9,11,12-OCTADECATRIENOIC ACID, (Z)-/CN
E9          1       9,11,12-TRIMETHYLHEPTADECANOIC ACID/CN
E10         1       9,11,12-TRIMETHYLHEXADECANOIC ACID/CN
E11         1       9,11,12-TRIMETHYLPENTADECANOIC ACID/CN
E12         1       9,11,12-TRIMETHYLTETRADECANOIC ACID/CN

=> s e3
L1          1 "9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER"/CN

=> d l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2011 ACS on STN
RN   467252-95-5  REGISTRY
ED   Entered STN:  29 Oct 2002
CN   Octadecadienoic acid, ethyl ester  (CA INDEX NAME)
OTHER NAMES:
CN   9,11(or 10,12)-Octadecadienoic acid ethyl ester
CN   Conjugated linoleic acid ethyl ester
MF   C20 H36 O2
CI   IDS
SR   CA
LC   STN Files:   BIOSIS, CA, CAPLUS, CASREACT, CHEMLIST, TOXCENTER, USPAT2,
       USPATFULL

     CM   1

     CRN  111-61-5
     CMF  C20 H40 O2


     O
     ||
EtO-C-(CH2)16-Me


**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

             11 REFERENCES IN FILE CA (1907 TO DATE)
             11 REFERENCES IN FILE CAPLUS (1907 TO DATE)


=> file caplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                20.60      20.83

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FILE COVERS 1907 - 3 Mar 2011 VOL 154 ISS 10
FILE LAST UPDATED: 2 Mar 2011 (20110302/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the fourth quarter of 2010.

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http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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=> s l1/prep
            11 L1
       5177151 PREP/RL
L2            1 L1/PREP
                (L1 (L) PREP/RL)

=> d l2 1 ibib abs

L2   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2008:650375  CAPLUS
DOCUMENT NUMBER:          151:510826
TITLE:                    Synthesizing ethyl ester of conjugated linoleic acid
                          with potassium alcoholate
AUTHOR(S):                Jiang, Wei; Wan, Zilong; Yi, Dan; Shi, Hongqi; Liu,
                          Fayi
CORPORATE SOURCE:         First Institute of Oceanography, State Ocean
                          Administration, Qingdao, 266061, Peop. Rep. China
SOURCE:                   Zhongguo Liangyou Xuebao (2007), 22(3), 77-79
                          CODEN: ZLXUFO; ISSN: 1003-0174
PUBLISHER:                Zhongguo Liangyou Xuebao Bianjibu
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
OTHER SOURCE(S):          CASREACT 151:510826
AB   The Et ester of conjugated linoleic acid (CLA) was synthesized with Et
     ester of safflower oil as raw material and with potassium alcoholate
     (KOCH2CH3) as catalyzer. The mol. structures of CLA were determined by
     UV-spectrum and GC-chromatogram. The CLA prepns. contained mainly cis-9,
     trans-11-CLA and trans-10, cis-12-CLA. The effects of catalyzer content,
     temperature, time and water content on the conjugation were investigated. It
     was shown that the optimized conditions were catalyzer 5%, water 1%, and
     temperature 95°. The conjugation rate was up to 95% when the reaction
     was carried on for 2-3 h under the optimal conditions.


=> d his
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     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
                E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
                E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
                E 9,11,10,12-OCTADECADIENOIC ACID/CN
                E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1              1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2              1 S L1/PREP

=> s 9,11(or 10,12)-octadecadienoic acid methyl ester
MISSING OPERATOR '9,11(OR'
The search profile that was entered contains terms or
nested terms that are not separated by a logical operator.

=> s 9,11-octadiecadienoic acid methyl ester
       2299179 9
       1190715 11
             0 OCTADIECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
       1184072 METHYL
           791 METHYLS
       1184538 METHYL
                  (METHYL OR METHYLS)
       1059680 ME
         12637 MES
       1067995 ME
                  (ME OR MES)
       1861732 METHYL
                  (METHYL OR ME)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L3           0 9,11-OCTADIECADIENOIC ACID METHYL ESTER
                  (9(W)11(W)OCTADIECADIENOIC(W)ACID(W)METHYL(W)ESTER)

=> s 9,11-octadecadienoic acid methyl ester
       2299179 9
       1190715 11
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
       1184072 METHYL
           791 METHYLS
       1184538 METHYL
```

```
                (METHYL OR METHYLS)
       1059680 ME
         12637 MES
       1067995 ME
                (ME OR MES)
       1861732 METHYL
                (METHYL OR ME)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                (ESTER OR ESTERS)
L4          26 9,11-OCTADECADIENOIC ACID METHYL ESTER
                (9(W)11(W)OCTADECADIENOIC(W)ACID(W)METHYL(W)ESTER)

=> d l4 1-2 ibib abs

L4   ANSWER 1 OF 26  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2004:412570  CAPLUS
DOCUMENT NUMBER:          140:412330
TITLE:                    Conjugated fatty acid-based emulsion and methods for
                          preparing and using same
INVENTOR(S):              Changaris, David G.
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 6 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.            KIND   DATE        APPLICATION NO.          DATE
     --------------        ----   --------    -------------------      --------
     US 20040096468         A1    20040520    US 2002-298405           20021118
     US 7074418             B2    20060711
     CA 2506298             A1    20040603    CA 2003-2506298          20031106
     CA 2506298             C     20090331
     WO 2004045506          A2    20040603    WO 2003-US35597          20031106
     WO 2004045506          A3    20040812
          W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
              CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
              GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
              LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
              OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
              TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
          RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
              BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
              ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
              TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003287584          A1    20040615    AU 2003-287584           20031106
     US 20070212380         A1    20070913    US 2006-421866           20060602
     US 7897160             B2    20110301
PRIORITY APPLN. INFO.:                         US 2002-298405      A    20021118
                                               WO 2003-US35597     W    20031106
AB   Stable emulsions comprising as a base one or more diene conjugated fatty
     acids (CFAs) are described.  Amino acids and other macromols. can be used
     to stabilize the emulsion.  The emulsion is also useful as a carrier and
     delivery vehicle of the macromols. to humans or animals in need of the
```

macromols. Plant oil exts., such as conjugated linoleic acid and its acylated derivs., are useful as the diene conjugated fatty acids that form the base of the stable emulsion. The emulsions formed are useful as nutritional or cosmetic adjuvant for oral based nutrition, skin diseases, cosmetic utility, enhancing oral nutrition, or pharmacol. benefit. Methods of producing and using the emulsions are also provided. For example, 50 mL of CFAs in the form of Tonalin (70% conjugated linoleic acid) were mech. mixed at room temperature with 5 g hydroxyproline to form a paste. Water (40 mL) was added to the paste and mech. mixed gently at room temperature to form a stable emulsion.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 26 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2004:253129 CAPLUS
DOCUMENT NUMBER: 140:272686
TITLE: Process for the preparation of conjugated linoleic acid from glyceridic oils
INVENTOR(S): Saebo, Asgeir; Saebo, Per Christian
PATENT ASSIGNEE(S): Natural Asa, Norway
SOURCE: U.S. Pat. Appl. Publ., 12 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20040058998	A1	20040325	US 2002-253216	20020924
US 6743931	B2	20040601		
CA 2499138	A1	20040408	CA 2003-2499138	20030924
CA 2499138	C	20100323		
WO 2004029186	A2	20040408	WO 2003-IB4897	20030924
WO 2004029186	A3	20040805		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003274548	A1	20040419	AU 2003-274548	20030924
AU 2003274548	B2	20070920		
EP 1546295	A2	20050629	EP 2003-758523	20030924
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006517237	T	20060720	JP 2004-539384	20030924
US 20040225142	A1	20041111	US 2004-858158	20040601
US 7115759	B2	20061003		
NO 2005001989	A	20050422	NO 2005-1989	20050422

PRIORITY APPLN. INFO.: US 2002-253216 A 20020924
WO 2003-IB4897 W 20030924

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention relates to the manufacture of conjugated linoleic acid which utilize alcoholate catalysts and esters of sunflower oil, safflower oil, or corn oil as the source of linoleic acid. Furthermore, the esters can be converted into free fatty acids by saponification and acidification.
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

=> s l4 and (pruify or purification)
0 PRUIFY
407487 PURIFICATION
1352 PURIFICATIONS
408433 PURIFICATION
(PURIFICATION OR PURIFICATIONS)
369573 PURIFN
241 PURIFNS
369677 PURIFN
(PURIFN OR PURIFNS)
595421 PURIFICATION
(PURIFICATION OR PURIFN)
L5 1 L4 AND (PRUIFY OR PURIFICATION)

=> d l5 ibib abs

L5 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1941:17078 CAPLUS
DOCUMENT NUMBER: 35:17078
ORIGINAL REFERENCE NO.: 35:2736a-d
TITLE: Drying oils and resins. Purification of polymerized methyl linoleate by molecular distillation
AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.
SOURCE: Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1941), 33, 86-9
CODEN: JIECAD; ISSN: 0095-9014
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO2 and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD25 1.4768, d425 0.9346 and a trimer (II), nD25 1.4836, d425 0.9474. Saponification and I nos., mol. weight, mol. refraction, etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

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=> FIL STNGUIDE
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         52.88      73.71

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                         -3.48      -3.48

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 25, 2011 (20110225/UP).

=> d his

     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
                E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
                E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
                E 9,11,10,12-OCTADECADIENOIC ACID/CN
                E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1            1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2            1 S L1/PREP
L3            0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4           26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5            1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

=> file caplus
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                          0.96      74.67

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
                                                           ENTRY    SESSION
CA SUBSCRIBER PRICE                                          0.00      -3.48

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
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FILE COVERS 1907 - 3 Mar 2011 VOL 154 ISS 10
FILE LAST UPDATED: 2 Mar 2011 (20110302/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2010

CAplus now includes complete International Patent Classification (IPC)
reclassification data for the fourth quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate
substance identification.

```
=> s 10,12-octadecadienoic acid methyl ester
       4689290 10
       1796599 12
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                 (ACID OR ACIDS)
       1184072 METHYL
           791 METHYLS
       1184538 METHYL
                 (METHYL OR METHYLS)
       1059680 ME
         12637 MES
       1067995 ME
                 (ME OR MES)
       1861732 METHYL
                 (METHYL OR ME)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                 (ESTER OR ESTERS)
L6          16 10,12-OCTADECADIENOIC ACID METHYL ESTER
                 (10(W)12(W)OCTADECADIENOIC(W)ACID(W)METHYL(W)ESTER)

=> s l6 and (purify or purification)
         20910 PURIFY
          2325 PURIFIES
         23105 PURIFY
                 (PURIFY OR PURIFIES)
        407487 PURIFICATION
          1352 PURIFICATIONS
        408433 PURIFICATION
                 (PURIFICATION OR PURIFICATIONS)
        369573 PURIFN
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          241 PURIFNS
       369677 PURIFN
                (PURIFN OR PURIFNS)
       595421 PURIFICATION
                (PURIFICATION OR PURIFN)
L7          0 L6 AND (PURIFY OR PURIFICATION)

=> d l6 1-2 ibib abs

L6   ANSWER 1 OF 16  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2004:412570  CAPLUS
DOCUMENT NUMBER:          140:412330
TITLE:                    Conjugated fatty acid-based emulsion and methods for
                          preparing and using same
INVENTOR(S):              Changaris, David G.
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 6 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ----------------    ----   --------    --------------------   --------
     US 20040096468       A1    20040520    US 2002-298405         20021118
     US 7074418           B2    20060711
     CA 2506298           A1    20040603    CA 2003-2506298        20031106
     CA 2506298           C     20090331
     WO 2004045506        A2    20040603    WO 2003-US35597        20031106
     WO 2004045506        A3    20040812
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE,
            GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK,
            LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ,
            OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
            TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
            BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
            ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
            TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     AU 2003287584        A1    20040615    AU 2003-287584         20031106
     US 20070212380       A1    20070913    US 2006-421866         20060602
     US 7897160           B2    20110301
PRIORITY APPLN. INFO.:                      US 2002-298405      A  20021118
                                            WO 2003-US35597     W  20031106
```

AB Stable emulsions comprising as a base one or more diene conjugated fatty acids (CFAs) are described. Amino acids and other macromols. can be used to stabilize the emulsion. The emulsion is also useful as a carrier and delivery vehicle of the macromols. to humans or animals in need of the macromols. Plant oil exts., such as conjugated linoleic acid and its acylated derivs., are useful as the diene conjugated fatty acids that form the base of the stable emulsion. The emulsions formed are useful as nutritional or cosmetic adjuvant for oral based nutrition, skin diseases, cosmetic utility, enhancing oral nutrition, or pharmacol. benefit. Methods of producing and using the emulsions are also provided. For example, 50 mL of CFAs in the form of Tonalin (70% conjugated linoleic

acid) were mech. mixed at room temperature with 5 g hydroxyproline to form a paste. Water (40 mL) was added to the paste and mech. mixed gently at room temperature to form a stable emulsion.
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 16 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:116137 CAPLUS
DOCUMENT NUMBER: 138:333409
TITLE: On the kinetics of the autoxidation of fats: Substrates with conjugated double bonds
AUTHOR(S): Brimberg, Ulla I.; Kamal-Eldin, Afaf
CORPORATE SOURCE: Jarfalla, Swed.
SOURCE: European Journal of Lipid Science and Technology (2003), 105(1), 17-22
CODEN: EJLTFM; ISSN: 1438-7697
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
AB This paper provides a kinetic evaluation of rate data on the oxidation of conjugated linoleic acid Me esters published by Kern et al. almost 50 yr ago. The results of the kinetic anal. suggest that the oxidation of pure substrates with conjugated double bonds in bulk starts with carbon-oxygen crosslinking causing oligomerization (d.p. ≈3). The reaction then proceeds with simultaneous oligomerization and formation of monomeric cyclic peroxides. The oligomerization was described by the empirical equation used previously for oleate and linoleate, which was modified by adding a power term. In contrast to the case of linoleate, hydroperoxides are only minor products in the oxidation of methyl-conjugated linoleate suggesting that micelle formation does not play a significant role in this oxidation
OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s 9,11-OCTADECADIENOIC acid ethyl ester
2299179 9
1190715 11
17656 OCTADECADIENOIC
5241421 ACID
1804215 ACIDS
5799226 ACID
(ACID OR ACIDS)
568409 ETHYL
49 ETHYLS
568438 ETHYL
(ETHYL OR ETHYLS)
758959 ET
9895 ETS
767170 ET
(ET OR ETS)
1170055 ETHYL
(ETHYL OR ET)
678631 ESTER
501337 ESTERS

```
        946527 ESTER
                  (ESTER OR ESTERS)
L8           6 9,11-OCTADECADIENOIC ACID ETHYL ESTER
                  (9(W)11(W)OCTADECADIENOIC(W)ACID(W)ETHYL(W)ESTER)

=> s l8 and (purify or purification)
         20910 PURIFY
          2325 PURIFIES
         23105 PURIFY
                  (PURIFY OR PURIFIES)
        407487 PURIFICATION
          1352 PURIFICATIONS
        408433 PURIFICATION
                  (PURIFICATION OR PURIFICATIONS)
        369573 PURIFN
           241 PURIFNS
        369677 PURIFN
                  (PURIFN OR PURIFNS)
        595421 PURIFICATION
                  (PURIFICATION OR PURIFN)
L9           0 L8 AND (PURIFY OR PURIFICATION)

=> s 10,12-OCTADECADIENOIC acid ethyl ester
       4689290 10
       1796599 12
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
        568409 ETHYL
            49 ETHYLS
        568438 ETHYL
                  (ETHYL OR ETHYLS)
        758959 ET
          9895 ETS
        767170 ET
                  (ET OR ETS)
       1170055 ETHYL
                  (ETHYL OR ET)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L10          0 10,12-OCTADECADIENOIC ACID ETHYL ESTER
                  (10(W)12(W)OCTADECADIENOIC(W)ACID(W)ETHYL(W)ESTER)

=> d his

     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
               E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
               E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
               E 9,11,10,12-OCTADECADIENOIC ACID/CN
               E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
               E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
```

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                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1            1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2            1 S L1/PREP
L3            0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4           26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5            1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6           16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7            0 S L6 AND (PURIFY OR PURIFICATION)
L8            6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9            0 S L8 AND (PURIFY OR PURIFICATION)
L10           0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER

=> s ((thin (a) film) or (wiped (a) film)) (s) (rectification or fractionating)
         755520 THIN
            577 THINS
         755945 THIN
                   (THIN OR THINS)
        1296983 FILM
        1057550 FILMS
        1667584 FILM
                   (FILM OR FILMS)
           2911 WIPED
        1296983 FILM
        1057550 FILMS
        1667584 FILM
                   (FILM OR FILMS)
          21297 RECTIFICATION
            125 RECTIFICATIONS
          21368 RECTIFICATION
                   (RECTIFICATION OR RECTIFICATIONS)
          11955 FRACTIONATING
L11         122 ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR FRAC
                TIONATING)

=> d l11 1-2 ibib abs

L11  ANSWER 1 OF 122  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2010:1429415  CAPLUS
TITLE:                    Bipolar Conduction in SnO Thin Films
AUTHOR(S):                Hosono, Hideo; Ogo, Yoichi; Yanagi, Hiroshi; Kamiya,
                          Toshio
CORPORATE SOURCE:         Frontier Research Center and Materials and Structures
                          Laboratory, Tokyo Institute of Technology, Midori,
                          Yokohama, 226-8503, Japan
SOURCE:                   Electrochemical and Solid-State Letters (2010), Volume
                          Date 2011, 14(1), H13-H16
                          CODEN: ESLEF6; ISSN: 1099-0062
PUBLISHER:                Electrochemical Society
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
```

AB Tin monoxide, SnO, is known as a p-type semiconductor. Comparison of the energy levels with the band alignment of oxide semiconductors implies that SnO is bipolar, and carrier polarity conversion to n-type was achieved by Sb doping. The electron mobility and the donor level are .apprx.2 cm2 (V s)-1 and .apprx.90 meV, which are similar to the hole mobility and the acceptor level in p-type SnO. n-Type conduction was further confirmed by the rectification characteristics of a homo p/n junction. A concept for realizing bipolar oxide semiconductors with high visible transparency is proposed.
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 2 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2010:1329799 CAPLUS
DOCUMENT NUMBER: 154:22807
TITLE: Effect of Li doping in NiO thin films on its transparent and conducting properties and its application in heteroepitaxial p-n junctions
AUTHOR(S): Dutta, Titas; Gupta, P.; Gupta, A.; Narayan, J.
CORPORATE SOURCE: Department of Materials Science and Engineering, North Carolina State University, Raleigh, NC, 27695-7907, USA
SOURCE: Journal of Applied Physics (2010), 108(8), 083715/1-083715/7
CODEN: JAPIAU; ISSN: 0021-8979
PUBLISHER: American Institute of Physics
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Li-doped NiO (LixNi1-xO) thin films were epitaxially grown along 111 orientation on c-Al2O3 by pulsed laser deposition. The structural, elec., and optical properties of the films were investigated using x-ray diffraction, four probe technique, and UV-visible spectra, resp. The epitaxial growth of 111 Li-doped NiO on 0001 sapphire was determined by high resolution x-ray Φ scan. Effects of the deposition condition and Li doping concentration variations on the elec. and optical properties of Li doped NiO films were also investigated. The anal. of the resistivity data show that doped Li ions occupy the substitutional sites in the films, enhancing the p-type conductivity The min. resistivity of 0.15 Ω cm was obtained for Li0.07Ni0.93O film. The activation energy of Li-doped NiO films were estimated to be in the range of 0.11-0.14 eV. Based upon these values, a possible elec. transport mechanism is discussed. A p-n heterojunction was also fabricated for the optimized p-Li doped NiO with n-ZnO. The insertion of i-MgZnO between the p and n layer led to improved current-voltage characteristics due to reduced leakage current. In the diode architecture, a heteroepitaxial relationship of [111]NiO.dblvert.[0001]MgZnO.dblvert.[0001]ZnO.dblvert.[0001]GZO.dblvert.[0001]Al2O3 among the layers was obtained. The p-i-n heterojunction showed good rectification behavior with turn on voltage of 2.8 V and breakdown voltage of 8.0 V. (c) 2010 American Institute of Physics.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

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     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
                E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
                E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
                E 9,11,10,12-OCTADECADIENOIC ACID/CN
                E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1            1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2            1 S L1/PREP
L3            0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4           26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5            1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6           16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7            0 S L6 AND (PURIFY OR PURIFICATION)
L8            6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9            0 S L8 AND (PURIFY OR PURIFICATION)
L10           0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11         122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F

=> d l11 50-55 ibib abs

L11  ANSWER 50 OF 122  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2006:618571  CAPLUS
DOCUMENT NUMBER:          145:222050
TITLE:                    Comparison of organic diode structures regarding
                          high-frequency rectification behavior in
                          radio-frequency identification tags
AUTHOR(S):                Steudel, Soeren; De Vusser, Stijn; Myny, Kris; Lenes,
                          Martijn; Genoe, Jan; Heremans, Paul
CORPORATE SOURCE:         Polymer and Molecular Electronics, IMEC, Louvain,
                          3001, Belg.
SOURCE:                   Journal of Applied Physics (2006), 99(11),
                          114519/1-114519/7
                          CODEN: JAPIAU; ISSN: 0021-8979
PUBLISHER:                American Institute of Physics
DOCUMENT TYPE:            Journal
LANGUAGE:                 English
AB   We compare the d.c. and high-frequency performance of 2 different organic
     diode structures, a vertical diode and an organic field effect transistor
     with shorted drain-gate contact, regarding their application in a
     rectifying circuit.  We fabricated both diode structures using the organic
     semiconductor pentacene.  D.c. measurements were performed showing a
     space-charge-limited current mobility of more than 0.1 cm2/V s for the
     vertical diode and a field effect mobility of 0.8 cm2/V s for the OTFT
     with shorted source-drain.  High-frequency measurements of those diode
     structures in a rectifier configuration show that both types of diodes are
     able to follow the base-carrier frequency of 13.56 MHz which is essential
     for viable radio-frequency-identification (rf-ID) tags.  Based on those
     results we evaluate the performance limits and advantages of each diode
     configuration regarding their application in an organic rf-ID tag.
```

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 51 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2006:324689 CAPLUS
DOCUMENT NUMBER: 145:303368
TITLE: Electrical properties of nickel phthalocyanine thin films using gold and lead electrodes
AUTHOR(S): Varghese, Abraham C.; Menon, C. S.
CORPORATE SOURCE: Thin Film Lab, School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, 686 560, India
SOURCE: Journal of Materials Science: Materials in Electronics (2006), 17(2), 149-153
CODEN: JSMEEV; ISSN: 0957-4522
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The elec. properties of Ni phthalocyanine (NiPc) thin film sandwich devices were investigated using Au and Pb electrode combinations. At low forward voltages with Au electrode as pos., the device showed rectification properties, while at higher forward voltages the conduction mechanisms were dominated by space charged limited conduction (SCLC) controlled by a single and an exponential trapping levels at two different ranges of applied voltages. Under the reverse bias a Schottky type of conduction process was identified. From our investigations we found that Au electrode acts as an ohmic contact and Pb electrodes as a blocking contact to NiPc layer with the existence of a barrier region at the lead electrode side of the NiPc layer. The effect of O doping on the elec. conductivity of these devices were also studied. After exposure to dry air for 30 days the device showed a higher order of current both in the forward and reverse bias. In the O-doped sample an increase in the rectification ratio and an enhanced value of trap concns. were observed
OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)
REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 52 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2006:211382 CAPLUS
DOCUMENT NUMBER: 145:134855
TITLE: Growth of n-type ZnO thin films by using mixture gas of hydrogen and argon
AUTHOR(S): Zhou, Xin; Wang, Shi-Qi; Lian, Gui-Jun; Xiong, Guang-Cheng
CORPORATE SOURCE: Department of Physics, Peking University, Beijing, 100871, Peop. Rep. China
SOURCE: Chinese Physics (Beijing, China) (2006), 15(1), 199-202
CODEN: CHPHF4; ISSN: 1009-1963
PUBLISHER: Chinese Physical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB High-quality oxide semiconductor ZnO thin films were prepared on single-crystal sapphire and LaAlO3 substrates by pulsed laser deposition (PLD) in the mixture gas of H and Ar. Low resistivity n-type ZnO thin films with smoother surface were achieved by deposition at 600° in 1Pa of the mixture gas. Ferromagnetism was observed in Co-doped ZnO thin

films and rectification I - V curves were found in p-GaN/n-ZnO and p-CdTe/n-ZnO heterostructure junctions. Using mixture gas of H and Ar in PLD technique was a flexible method for depositing high-quality n-type oxide semiconductor films, especially for the multilayer thin film devices.

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 53 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:172781 CAPLUS

DOCUMENT NUMBER: 144:379644

TITLE: Electrical conduction processes in as-deposited indium phthalocyanine chloride thin films using gold and aluminum electrode combination

AUTHOR(S): Samuel, Mammen; Menon, C. S.; Unnikrishnan, N. V.

CORPORATE SOURCE: School of Pure and Applied Physics, Mahatma Gandhi University, Kottayam, 686 560, India

SOURCE: Journal of Physics: Condensed Matter (2006), 18(1), 135-141
CODEN: JCOMEL; ISSN: 0953-8984

PUBLISHER: Institute of Physics Publishing

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Sandwich structures (Au-InPcCl-Al) were fabricated by successive vacuum deposition of indium phthalocyanine chloride (InPcCl) thin films and aluminum (Al) fingers onto ohmic gold (Au) electrodes on glass substrates. Device characteristics of as-deposited Au/InPcCl/Al were obtained and found to show rectification properties. C.d.-voltage characteristics under forward bias (aluminum electrode neg.) are due to ohmic conduction at lower voltages. At higher voltages there is space charge limited conductivity (SCLC) controlled by an exponential trapping distribution above the valence edge. Transport properties of the material at ambient temperature were obtained from the anal. of the samples in the ohmic and SCLC regions. Under the reverse bias, Schottky emission is identified at lower voltages.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 54 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN

ACCESSION NUMBER: 2006:57855 CAPLUS

DOCUMENT NUMBER: 144:302737

TITLE: Synthesis of semiconducting thin films with nanometer-scale periodicity by solution-phase coassembly of zintl clusters with surfactants

AUTHOR(S): Riley, Andrew E.; Korlann, Scott D.; Richman, Erik K.; Tolbert, Sarah H.

CORPORATE SOURCE: Department of Chemistry and Biochemistry, The University of California, Los Angeles, Los Angeles, CA, 90095-1569, USA

SOURCE: Angewandte Chemie, International Edition (2006), 45(2), 235-241
CODEN: ACIEF5; ISSN: 1433-7851

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal
LANGUAGE: English
AB Inorg. cluster anions (Zintl ions) were cross-linked by transition metals in the presence of alkyl ammonium surfactants and gold substrates to produce nanostructured thin films. These films display a variety of phases, including hexagonal, cubic, lamellar, and wormlike. Optical measurements show that the films are semiconductors, and I-V measurements indicate rectifying behavior.
OS.CITING REF COUNT: 15 THERE ARE 15 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS)
REFERENCE COUNT: 63 THERE ARE 63 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L11 ANSWER 55 OF 122 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2005:1273950 CAPLUS
DOCUMENT NUMBER: 144:498915
TITLE: Properties of ZnO thin films grown on Si substrates by MOCVD and ZnO/Si heterojunctions
AUTHOR(S): Zhang, Yuantao; Du, Guotong; Zhang, Baolin; Cui, Yongguo; Zhu, Huichao; Chang, Yuchun
CORPORATE SOURCE: College of Electronic Science and Engineering, State Key Laboratory on Integrated Optoelectronics, Jilin University, Changchun, 130012, Peop. Rep. China
SOURCE: Semiconductor Science and Technology (2005), 20(11), 1132-1135
CODEN: SSTEET; ISSN: 0268-1242
PUBLISHER: Institute of Physics Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Undoped n-ZnO thin films were successfully grown on p-Si (1 0 0) substrates by low-pressure metalorg. chemical vapor deposition (MOCVD). The c-axis oriented ZnO films were grown on Si at different temps. using diethyl-zinc (DEZn) and oxygen (O2). The structural and optical properties of ZnO films were investigated using x-ray diffraction and photoluminescence (PL) spectra, resp. The ZnO film grown at 610° shows the best crystallinity and optical quality. Current-voltage (I-V) characteristics of all n-ZnO/p-Si heterojunctions exhibit nonlinear and rectifying characteristics with a small current leakage in the reverse direction. Junction leakage of the heterojunction deposited at 620° is higher than those of the other heterojunctions.
OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS RECORD (19 CITINGS)
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s (l4 or l6 or l8) (L) ((thin (a) film) or (wiped (a) film))
755520 THIN
577 THINS
755945 THIN
(THIN OR THINS)
1296983 FILM
1057550 FILMS
1667584 FILM
(FILM OR FILMS)
2911 WIPED
1296983 FILM

```
       1057550 FILMS
       1667584 FILM
                  (FILM OR FILMS)
L12          0 (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))

=> d his

     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
                E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
                E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
                E 9,11,10,12-OCTADECADIENOIC ACID/CN
                E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1            1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2            1 S L1/PREP
L3            0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4           26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5            1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6           16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7            0 S L6 AND (PURIFY OR PURIFICATION)
L8            6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9            0 S L8 AND (PURIFY OR PURIFICATION)
L10           0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11         122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F
L12           0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))

=> s molecular (a) distillation
       1511188 MOLECULAR
           122 MOLECULARS
       1511282 MOLECULAR
                  (MOLECULAR OR MOLECULARS)
       3069754 MOL
        821261 MOLS
       3513025 MOL
                  (MOL OR MOLS)
       4123834 MOLECULAR
                  (MOLECULAR OR MOL)
         75663 DISTILLATION
           504 DISTILLATIONS
         75849 DISTILLATION
                  (DISTILLATION OR DISTILLATIONS)
        194110 DISTN
          1896 DISTNS
        194876 DISTN
                  (DISTN OR DISTNS)
        221769 DISTILLATION
                  (DISTILLATION OR DISTN)
```

```
L13       2272 MOLECULAR (A) DISTILLATION

=> s (l4 or l6 or l8) (L) l13
L14          0 (L4 OR L6 OR L8) (L) L13

=> s l6 and l13
L15          0 L6 AND L13

=> s l6 and (molecular (a) distillation)
       1511188 MOLECULAR
           122 MOLECULARS
       1511282 MOLECULAR
                  (MOLECULAR OR MOLECULARS)
       3069754 MOL
        821261 MOLS
       3513025 MOL
                  (MOL OR MOLS)
       4123834 MOLECULAR
                  (MOLECULAR OR MOL)
         75663 DISTILLATION
           504 DISTILLATIONS
         75849 DISTILLATION
                  (DISTILLATION OR DISTILLATIONS)
        194110 DISTN
          1896 DISTNS
        194876 DISTN
                  (DISTN OR DISTNS)
        221769 DISTILLATION
                  (DISTILLATION OR DISTN)
          2272 MOLECULAR (A) DISTILLATION
L16          0 L6 AND (MOLECULAR (A) DISTILLATION)

=> d his

     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
                E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
                E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
                E 9,11,10,12-OCTADECADIENOIC ACID/CN
                E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
                E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1            1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2            1 S L1/PREP
L3            0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4           26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5            1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6           16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7            0 S L6 AND (PURIFY OR PURIFICATION)
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```
L8             6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9             0 S L8 AND (PURIFY OR PURIFICATION)
L10            0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11          122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F
L12            0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))
L13         2272 S MOLECULAR (A) DISTILLATION
L14            0 S (L4 OR L6 OR L8) (L) L13
L15            0 S L6 AND L13
L16            0 S L6 AND (MOLECULAR (A) DISTILLATION)

=> s 9,11-OCTADECADIENOIC acid alkyl ester
       2299179 9
       1190715 11
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                  (ALKYL OR ALKYLS)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L17          0 9,11-OCTADECADIENOIC ACID ALKYL ESTER
                  (9(W)11(W)OCTADECADIENOIC(W)ACID(W)ALKYL(W)ESTER)

=> s 10,12-OCTADECADIENOIC acid alkyl ester
       4689290 10
       1796599 12
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                  (ALKYL OR ALKYLS)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L18          0 10,12-OCTADECADIENOIC ACID ALKYL ESTER
                  (10(W)12(W)OCTADECADIENOIC(W)ACID(W)ALKYL(W)ESTER)

=> s 9,11-OCTADECADIENOIC acid butyl ester
       2299179 9
       1190715 11
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
        338553 BUTYL
```

```
            59 BUTYLS
        338585 BUTYL
                  (BUTYL OR BUTYLS)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L19          0 9,11-OCTADECADIENOIC ACID BUTYL ESTER
                  (9(W)11(W)OCTADECADIENOIC(W)ACID(W)BUTYL(W)ESTER)

=> s 10,12-OCTADECADIENOIC acid
       4689290 10
       1796599 12
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
L20         473 10,12-OCTADECADIENOIC ACID
                  (10(W)12(W)OCTADECADIENOIC(W)ACID)

=> s 9,11-OCTADECADIENOIC acid
       2299179 9
       1190715 11
         17656 OCTADECADIENOIC
       5241421 ACID
       1804215 ACIDS
       5799226 ACID
                  (ACID OR ACIDS)
L21         622 9,11-OCTADECADIENOIC ACID
                  (9(W)11(W)OCTADECADIENOIC(W)ACID)

=> s l21 (s) (alkyl (4a) ester)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                  (ALKYL OR ALKYLS)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L22          1 L21 (S) (ALKYL (4A) ESTER)

=> d l22 ibib abs

L22  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2002:240994  CAPLUS
DOCUMENT NUMBER:          136:261913
TITLE:                    Method for producing glycerides of conjugated,
                          polyunsaturated fatty acids from their alkyl esters
INVENTOR(S):              Baldenius, Kai-Uwe; Ptock, Arne
PATENT ASSIGNEE(S):       Basf Aktiengesellschaft, Germany
SOURCE:                   PCT Int. Appl., 26 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
```

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024935	A1	20020328	WO 2001-EP10806	20010919
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002012256	A	20020402	AU 2002-12256	20010919
EP 1322776	A1	20030702	EP 2001-980406	20010919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20030175914	A1	20030918	US 2003-380180	20030312
PRIORITY APPLN. INFO.:			DE 2000-10046879 A	20000920
			WO 2001-EP10806 W	20010919

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method is provided for producing glycerides that contain conjugated, polyunsatd. fatty acids by reacting the alkyl ester of the conjugated polyunsatd. fatty acids with glycerol or glycerides in the presence of a lipase. Thus, an conjugated linoleic acid preparation containing 36% 9Z,11E-octadecadienoic acid Et ester and 36% 10E,12Z-octadecadienoic acid Et ester and 3% other Et esters was reacted with glycerol and an immobilized lipase at 35 °C and 10 mbar pressure. A mixture of mono-, di-, and triglycerides was produced.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> s l20 (s) (alkyl (4a) ester)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                  (ALKYL OR ALKYLS)
        678631 ESTER
        501337 ESTERS
        946527 ESTER
                  (ESTER OR ESTERS)
L23           1 L20 (S) (ALKYL (4A) ESTER)

=> d l23 ibib abs

L23  ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2002:240994  CAPLUS
DOCUMENT NUMBER:          136:261913
TITLE:                    Method for producing glycerides of conjugated,
                          polyunsaturated fatty acids from their alkyl esters
INVENTOR(S):              Baldenius, Kai-Uwe; Ptock, Arne
PATENT ASSIGNEE(S):       Basf Aktiengesellschaft, Germany
SOURCE:                   PCT Int. Appl., 26 pp.
```

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002024935	A1	20020328	WO 2001-EP10806	20010919
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002012256	A	20020402	AU 2002-12256	20010919
EP 1322776	A1	20030702	EP 2001-980406	20010919
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 20030175914	A1	20030918	US 2003-380180	20030312
PRIORITY APPLN. INFO.:			DE 2000-10046879 A	20000920
			WO 2001-EP10806 W	20010919

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method is provided for producing glycerides that contain conjugated, polyunsatd. fatty acids by reacting the alkyl ester of the conjugated polyunsatd. fatty acids with glycerol or glycerides in the presence of a lipase. Thus, an conjugated linoleic acid preparation containing 36% 9Z,11E-octadecadienoic acid Et ester and 36% 10E,12Z-octadecadienoic acid Et ester and 3% other Et esters was reacted with glycerol and an immobilized lipase at 35 °C and 10 mbar pressure. A mixture of mono-, di-, and triglycerides was produced.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
E 9,11,10,12-OCTADECADIENOIC ACID/CN
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2 1 S L1/PREP
L3 0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER

```
L4            26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5             1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6            16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7             0 S L6 AND (PURIFY OR PURIFICATION)
L8             6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9             0 S L8 AND (PURIFY OR PURIFICATION)
L10            0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11          122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F
L12            0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))
L13         2272 S MOLECULAR (A) DISTILLATION
L14            0 S (L4 OR L6 OR L8) (L) L13
L15            0 S L6 AND L13
L16            0 S L6 AND (MOLECULAR (A) DISTILLATION)
L17            0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER
L18            0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER
L19            0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER
L20          473 S 10,12-OCTADECADIENOIC ACID
L21          622 S 9,11-OCTADECADIENOIC ACID
L22            1 S L21 (S) (ALKYL (4A) ESTER)
L23            1 S L20 (S) (ALKYL (4A) ESTER)

=> s l20 (L) (alkyl (2a) ester#)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                 (ALKYL OR ALKYLS)
        946663 ESTER#
L24            1 L20 (L) (ALKYL (2A) ESTER#)

=> s l24 not l23
L25            0 L24 NOT L23

=> s l21 (L) (alkyl (2a) ester#)
        673607 ALKYL
          7059 ALKYLS
        676832 ALKYL
                 (ALKYL OR ALKYLS)
        946663 ESTER#
L26            1 L21 (L) (ALKYL (2A) ESTER#)

=> s l26 not l22
L27            0 L26 NOT L22

=> s (l20 or l21) and (molecular (2a) distillation)
       1511188 MOLECULAR
           122 MOLECULARS
       1511282 MOLECULAR
                 (MOLECULAR OR MOLECULARS)
       3069754 MOL
        821261 MOLS
       3513025 MOL
                 (MOL OR MOLS)
       4123834 MOLECULAR
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```
                (MOLECULAR OR MOL)
         75663 DISTILLATION
           504 DISTILLATIONS
         75849 DISTILLATION
                (DISTILLATION OR DISTILLATIONS)
        194110 DISTN
          1896 DISTNS
        194876 DISTN
                (DISTN OR DISTNS)
        221769 DISTILLATION
                (DISTILLATION OR DISTN)
          2778 MOLECULAR (2A) DISTILLATION
L28          4 (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)

=> d l28 1-4 ibib abs

L28  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2008:784750  CAPLUS
DOCUMENT NUMBER:          151:268902
TITLE:                    Separation and purification of c9,t11-CLA isomer
AUTHOR(S):                Yang, Lihua; Nagao, Toshihiro
CORPORATE SOURCE:         College of Biotechnology, Inner Mongolia Agricultural
                          University, Hohhot, Inner Mongolia Province, 010018,
                          Peop. Rep. China
SOURCE:                   Hebei Nongye Daxue Xuebao (2007), 30(3), 101-104
                          CODEN: HNDBEM; ISSN: 1000-1573
PUBLISHER:                Hebei Nongye Daxue Xuebao Bianjibu
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
AB   For further studies on the physiol. and biochem. characteristic of
     c9,t11-CLA (conjugated linoleic acid), high-purity c9,t11-CLA isomer must
     be obtained.  Candida rugosa lipase can be used to enrich the isomer of
     c9,t11-CLA by a two-step selective esterification.  For fractionation and
     enrichment of it, mol. distillation was used, and the
     c9,t11-CLA content in lauryl esters increased to 92.2 wt%.

L28  ANSWER 2 OF 4  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2004:1014245  CAPLUS
DOCUMENT NUMBER:          142:5567
TITLE:                    Conjugated fatty acid polyglycerin esters, their
                          manufacture with lipase, and their purification by
                          molecular distillation
INVENTOR(S):              Yamauchi, Yoshie; Yamamoto, Takaya; Ogita, Kanefusa;
                          Shimada, Hiroshi; Nagao, Toshihiro; Watanabe, Yoshi
PATENT ASSIGNEE(S):       Rinoru Oil Mills Co., Ltd., Japan
SOURCE:                   Jpn. Kokai Tokkyo Koho, 13 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:            Patent
LANGUAGE:                 Japanese
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     --------------      ----   --------    -------------------    --------
     JP 2004331607        A     20041125    JP 2003-131893         20030509
PRIORITY APPLN. INFO.:                      JP 2003-131893         20030509
OTHER SOURCE(S):          CASREACT 142:5567
```

AB Title esters, useful as food emulsifiers, beverage additives, etc. (no data), are manufactured by esterification of conjugated fatty acids with polyglycerin with lipase as a catalyst. Thus, CLA 80 (conjugated linoleic acid) was esterified with diglycerin with Lipase G (Penicillium camembertii lipase) to manufacture esters with 70.2% esterification rate.

L28 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:494791 CAPLUS
DOCUMENT NUMBER: 139:322593
TITLE: Fractionation of conjugated linoleic acid isomers by selective hydrolysis with Candida rugosa lipase
AUTHOR(S): Yamauchi-Sato, Yoshie; Nagao, Toshihiro; Yamamoto, Takaya; Terai, Tadamasa; Sugihara, Akio; Shimada, Yuji
CORPORATE SOURCE: Rinoru Oil Mills Co. Ltd., Tokyo, 103-0027, Japan
SOURCE: Journal of Oleo Science (2003), 52(7), 367-374
CODEN: JOSOAP; ISSN: 1345-8957
PUBLISHER: Japan Oil Chemists' Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It was attempted to prepare cis-9, trans-11 conjugated linoleic acid (c9,t11-CLA) and t10,c12-CLA concs. that can be used as foods. A free fatty acid mixture (FFA-CLA) containing almost equal amts. of c9,t11- and t10,c12-CLAs was esterified with glycerol using immobilized Rhizomucor miehei lipase, and the resulting acylglycerols (Gly-CLA) were purified by mol. distillation Contents of c9,t11- and t10,c12-CLAs in Gly-CLA were the same as those in FFA-CLA: c9,t11-CLA, 33.7%; t10,c12-CLA, 34.5%. Gly-CLA was first hydrolyzed with an equal weight of water and 1.0 U/g-mixture of Candida rugosa lipase, and c9,t11-CLA-rich FFAs were prepared by mol. distillation: purity of c9,t11-CLA based on the total content of c9,t11- and t10,c12-CLAs, 72.9%. Meanwhile, purity of t10,c12-CLA in acylglycerols was 65.0%. To further increase the purity, the acylglycerols were hydrolyzed again with 15 U/g-mixture of C. rugosa lipase, resulting in enrichment of t10,c12-CLA in acylglycerols (purity of t10,c12-CLA, 80.4%). Non-selective hydrolysis of t10,c12-CLA-rich acylglycerols with 200 U/g-mixture of C. rugosa lipase produced t10,c12-CLA-rich FFAs (purity of t10,c12-CLA, 81.5%). In addition, c9,t11-CLA-rich FFAs were successfully esterified with glycerol using immobilized R. miehei lipase, and c9,t11-CLA-rich acylglycerols can be synthesized (purity of c9,t11-CLA, 73.0%). The process was composed of reactions with C. rugosa and R. miehei lipases, which can be used for production of foods, and mol. distillation Hence, the c9,t11- and t10,c12-CLA concs. can be used as foods.
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1941:17078 CAPLUS
DOCUMENT NUMBER: 35:17078
ORIGINAL REFERENCE NO.: 35:2736a-d
TITLE: Drying oils and resins. Purification of polymerized methyl linoleate by molecular distillation
AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.
SOURCE: Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1941), 33, 86-9

CODEN: JIECAD; ISSN: 0095-9014
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO2 and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD25 1.4768, d425 0.9346 and a trimer (II), nD25 1.4836, d425 0.9474. Saponification and I nos., mol. weight, mol. refraction, etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
E 9,11,10,12-OCTADECADIENOIC ACID/CN
E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1 1 S E3

FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2 1 S L1/PREP
L3 0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4 26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5 1 S L4 AND (PRUIFY OR PURIFICATION)

FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6 16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7 0 S L6 AND (PURIFY OR PURIFICATION)
L8 6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9 0 S L8 AND (PURIFY OR PURIFICATION)
L10 0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11 122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F
L12 0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))
L13 2272 S MOLECULAR (A) DISTILLATION
L14 0 S (L4 OR L6 OR L8) (L) L13

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L15           0 S L6 AND L13
L16           0 S L6 AND (MOLECULAR (A) DISTILLATION)
L17           0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER
L18           0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER
L19           0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER
L20         473 S 10,12-OCTADECADIENOIC ACID
L21         622 S 9,11-OCTADECADIENOIC ACID
L22           1 S L21 (S) (ALKYL (4A) ESTER)
L23           1 S L20 (S) (ALKYL (4A) ESTER)
L24           1 S L20 (L) (ALKYL (2A) ESTER#)
L25           0 S L24 NOT L23
L26           1 S L21 (L) (ALKYL (2A) ESTER#)
L27           0 S L26 NOT L22
L28           4 S (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)

=> s (l20 or l21) and (fractionating or recitification)
        11955 FRACTIONATING
            7 RECITIFICATION
L29         0 (L20 OR L21) AND (FRACTIONATING OR RECITIFICATION)

=> s (l20 or l21) and distillation
        75663 DISTILLATION
          504 DISTILLATIONS
        75849 DISTILLATION
                (DISTILLATION OR DISTILLATIONS)
       194110 DISTN
         1896 DISTNS
       194876 DISTN
                (DISTN OR DISTNS)
       221769 DISTILLATION
                (DISTILLATION OR DISTN)
L30        27 (L20 OR L21) AND DISTILLATION

=> s l30 and (fractionation or fractionating)
       116596 FRACTIONATION
         3288 FRACTIONATIONS
       118408 FRACTIONATION
                (FRACTIONATION OR FRACTIONATIONS)
        11955 FRACTIONATING
L31         6 L30 AND (FRACTIONATION OR FRACTIONATING)

=> d l31 1-6 ibib abs

L31  ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER:         2008:784750  CAPLUS
DOCUMENT NUMBER:          151:268902
TITLE:                    Separation and purification of c9,t11-CLA isomer
AUTHOR(S):                Yang, Lihua; Nagao, Toshihiro
CORPORATE SOURCE:         College of Biotechnology, Inner Mongolia Agricultural
                          University, Hohhot, Inner Mongolia Province, 010018,
                          Peop. Rep. China
SOURCE:                   Hebei Nongye Daxue Xuebao (2007), 30(3), 101-104
                          CODEN: HNDBEM; ISSN: 1000-1573
PUBLISHER:                Hebei Nongye Daxue Xuebao Bianjibu
DOCUMENT TYPE:            Journal
LANGUAGE:                 Chinese
AB   For further studies on the physiol. and biochem. characteristic of
```

c9,t11-CLA (conjugated linoleic acid), high-purity c9,t11-CLA isomer must be obtained. Candida rugosa lipase can be used to enrich the isomer of c9,t11-CLA by a two-step selective esterification. For fractionation and enrichment of it, mol. distillation was used, and the c9,t11-CLA content in lauryl esters increased to 92.2 wt%.

L31 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 2003:494791 CAPLUS
DOCUMENT NUMBER: 139:322593
TITLE: Fractionation of conjugated linoleic acid isomers by selective hydrolysis with Candida rugosa lipase
AUTHOR(S): Yamauchi-Sato, Yoshie; Nagao, Toshihiro; Yamamoto, Takaya; Terai, Tadamasa; Sugihara, Akio; Shimada, Yuji
CORPORATE SOURCE: Rinoru Oil Mills Co. Ltd., Tokyo, 103-0027, Japan
SOURCE: Journal of Oleo Science (2003), 52(7), 367-374
CODEN: JOSOAP; ISSN: 1345-8957
PUBLISHER: Japan Oil Chemists' Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It was attempted to prepare cis-9, trans-11 conjugated linoleic acid (c9,t11-CLA) and t10,c12-CLA concs. that can be used as foods. A free fatty acid mixture (FFA-CLA) containing almost equal amts. of c9,t11- and t10,c12-CLAs was esterified with glycerol using immobilized Rhizomucor miehei lipase, and the resulting acylglycerols (Gly-CLA) were purified by mol. distillation Contents of c9,t11- and t10,c12-CLAs in Gly-CLA were the same as those in FFA-CLA: c9,t11-CLA, 33.7%; t10,c12-CLA, 34.5%. Gly-CLA was first hydrolyzed with an equal weight of water and 1.0 U/g-mixture of Candida rugosa lipase, and c9,t11-CLA-rich FFAs were prepared by mol. distillation: purity of c9,t11-CLA based on the total content of c9,t11- and t10,c12-CLAs, 72.9%. Meanwhile, purity of t10,c12-CLA in acylglycerols was 65.0%. To further increase the purity, the acylglycerols were hydrolyzed again with 15 U/g-mixture of C. rugosa lipase, resulting in enrichment of t10,c12-CLA in acylglycerols (purity of t10,c12-CLA, 80.4%). Non-selective hydrolysis of t10,c12-CLA-rich acylglycerols with 200 U/g-mixture of C. rugosa lipase produced t10,c12-CLA-rich FFAs (purity of t10,c12-CLA, 81.5%). In addition, c9,t11-CLA-rich FFAs were successfully esterified with glycerol using immobilized R. miehei lipase, and c9,t11-CLA-rich acylglycerols can be synthesized (purity of c9,t11-CLA, 73.0%). The process was composed of reactions with C. rugosa and R. miehei lipases, which can be used for production of foods, and mol. distillation Hence, the c9,t11- and t10,c12-CLA concs. can be used as foods.
OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L31 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1965:51067 CAPLUS
DOCUMENT NUMBER: 62:51067
ORIGINAL REFERENCE NO.: 62:9000b-c
TITLE: The geometric isomers of conjugated octadecadienoates from dehydrated methyl ricinoleate
AUTHOR(S): Body, D. R.; Shorland, F. B.
CORPORATE SOURCE: Dept. Sci. Ind. Res., Wellington, N. Z.
SOURCE: Journal of the American Oil Chemists' Society (1965),

42(1), 5-8
CODEN: JAOCA7; ISSN: 0003-021X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The dehydration of Me ricinoleate by heating in vacuo in the presence of KHSO4 resulted in the formation of the following conjugated octadecadienoates expressed as a % of the final product: cis,trans (trans,cis), 14.3; cis,cis, 11.2; trans,trans, 7.3. The isomers contained the double bonds predominantly in the 9,11 position but the possible presence of traces of 8,10 and other conjugated isomers is not excluded. Using urea "inclusion" fractionation and low temperature crystallization from Me2CO, Me cis-9,cis-11-octadecadienoate was isolated. The Me esters of com. dehydrated castor oil fatty acids contained the following % of conjugated octadecadienoate isomers: cis,trans (trans,cis), 20.3; cis,cis, 8.0; trans,trans, 5.4. From these mixts. concentration of cis,trans (trans,cis)- and trans,trans-octade-cadienoates were prepared by fractional distn . and low temperature crystallization The conjugated octadecadienoates consisted of mixts. of positional isomers with double bonds mainly in the 8,10 and 9,11 positions with lesser amts. in the 7,9 and 10,12 positions. 27 references.
OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)

L31 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1956:89294 CAPLUS
DOCUMENT NUMBER: 50:89294
ORIGINAL REFERENCE NO.: 50:16821g-i,16822a-e
TITLE: The hydrogenation of conjugated systems particularly of chinese wood oil
AUTHOR(S): Van Loon, J.; Kooij, L. W.; Vermunt, G.
SOURCE: Recueil des Travaux Chimiques des Pays-Bas et de la Belgique (1950), 69, 1567-75
CODEN: RTCPB4; ISSN: 0370-7539
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The hydrogenation of Chinese wood oil (I) at low pressure demonstrated a more complicated reaction than previously postulated by Boeseken, et al. (C.A. 24, 2985), since shifting of the double bonds takes place besides the addition of H. I was hydrogenated at 180° and atmospheric pressure in the presence of 3% diatomaceous earth containing 20% Ni while being stirred at 1500 r.p.m. The nD70 value and the diene value (determined with maleic anhydride) dropped successively from 1.5018 and 70 to: 1.4972, 61; 1.4904, 51; 1.4824, 42; 1.4764, 32; 1.4725, 27. The % saturation of the I and final hydrogenation product were 4.15 and 4.6, resp. A similar decrease of the nD70 and diene values was observed in a run carried out with stirring at 8000 r.p.m, under otherwise identical conditions. The initial values 1.5018, 70, changed successively to: 1.4821, 43; 1.4789, 38; 1.4770, 34; 1.4668, 20. The same values of Et esters of wood oil fatty acids, 1.4759, 62. dropped during hydrogenation at 8000 r.p.m, successively to: 1.4620, 62; 1.4451, 22; 1.4342, 2; 1.4338, 0. I, nD70 1.5018, diene value 70, was hydrogenated at 145° and 1 r.p.m, under various initial pressures (initial pressure in atmospheric, nD70, and diene value given) 4.5, 1.4868, 53; 3.3, 1.4759, 36; 6.1, 1.4570, 7.5; 4.3, 1.4527, 5.4. I was hydrogenated at 1 atmospheric and 180° in the usual manner until 2 molar equivs. H had been absorbed; the resulting octadecenoic acids (II) were oxidized with

KMnO4 and the dibasic acids separated from the fission products and recrystd. from CHCl3 and H2O. The dicarboxylic acids found were C13 in a small amount, C12 as main fraction, and C11, C10, and C9 in smaller amts. than C12; the hydrogenated material contains thus the following II (position of double bond given): 13-14 (minor amount); 12-13 (main component); 11-12 (2nd main component); 10-11 (minor amount); 9-10 (minor amount). A similar run was carried out at 1 atmospheric and 180° until 1 molar equivalent H had been absorbed; oxidative fission of the hydrogenation product and steam distillation of the mixture followed by fractionation gave AmCO2H and PrCO2H (but no BuCO2H); the following dicarboxylic acids were isolated from the residue and recrystd. from CHCl3: C12 and C11 (main components); C10 and C9 (minor components). These fission products indicate the presence of the following linoleic acids (position of double bonds given): 9,12 and (or) 9,14; 10,12; 11,14; 12,14. I hydrogenated at 5-1 atmospheric and 145° until 2 molar equivs. H was absorbed gave a product which still contained eleostearic acid (IV) with a considerably increased percentage of C17H35CO2H (V); ozonization as well as KMnO4 oxidation of the hydrogenation product gave as main fission products the C9, C12, and C13 dicarboxylic acids; the hydrogenation under these conditions is not selective and a very complicated mixture of fatty acids is formed. Addition of 1 molar equivalent H at 5-1 atmospheric and 145° to I gave a product which still contained a large amount of IV together with an increased quantity of V and di- and monounsatd. acids; the hydrogenation product oxidized with ozone or KMnO4 gave as main products C9, C10, and C12 dicarboxylic acids and C5 and C6 monocarboxylic acids. These results demonstrate that a very complicated mixture of component acids is already formed during the 1st stage of the hydrogenation at 5 atmospheric pressure and 145°.

L31 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1941:54042 CAPLUS
DOCUMENT NUMBER: 35:54042
ORIGINAL REFERENCE NO.: 35:8330e-i
TITLE: The component acids of Sterculia foetida seed fat (sterculia oil): a correction of work previously reported
AUTHOR(S): Hilditch, T. P.; Meara, M. L.; Zaky, Y. A. H.
SOURCE: Journal of the Society of Chemical Industry, London (1941), 60, 198-203
CODEN: JSCIAN; ISSN: 0368-4075
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 28, 5265.4. A reinvestigation of the seed and fruit-coat fats previously reported as those of Sterculia foetida but actually obtained from Dacryodes rostrata, var. pubescens (Bl.) H. J. Lam, gave the following values (% by weight) for the component acids in the pale-green solid fat m. 32-34°, I2 number (Wijs) 53.3, saponification number 302.9, free acidity (as oleic acid) 1.9%: myristic 1.0, palmitic 12.7, stearic 30.9, arachidic 3.1, oleic 49.5, linoleic 2.8. These figures are in agreement with the previous investigation but show a significant deviation from those of Steger and van Loon (C. A. 34, 3937.9), and it is concluded that earlier workers investigated material from Dacryodes and not from Canarium species. Extraction of seeds of Sterculia foetida with light petroleum (b. 40-60°) yielded a yellow oil, liquid at room temperature, saponification number 300,
I2 number (Wijs 1/2 hr.) 70.0, free acidity (as oleic acid) 2.5%, unsapond. matter less than 1%, nD20 1.476. The oil polymerizes suddenly on heating

to 250°. The following percentages (by weight) of fat acids were estimated from the results of (1) distillation of the mixed Me esters, (2) Pb salt separation of the mixed fat acids and ester fractionation of the hydrogenated acids (Ni/kieselguhr at 180°), (3) crystallization of the hydrogenated original oil from acetone: myristic 5.6, palmitic 8.8, oleic and linoleic 13.2, C19H34O2 72.4. From the products of oxidation with KMnO4 of the mixed fat acid (Me hexyl ketone, azelaic acid, heptoic acid, an unidentified water-soluble dibasic acid) it is concluded that C19H34O2 is 12-methyl-9,11-octadecadienoic acid
. The position of the 9-bond is not quite certain.

L31 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2011 ACS on STN
ACCESSION NUMBER: 1941:17078 CAPLUS
DOCUMENT NUMBER: 35:17078
ORIGINAL REFERENCE NO.: 35:2736a-d
TITLE: Drying oils and resins. Purification of polymerized methyl linoleate by molecular distillation
AUTHOR(S): Bradley, Theodore F.; Johnston, Wm. B.
SOURCE: Journal of Industrial and Engineering Chemistry (Washington, D. C.) (1941), 33, 86-9
CODEN: JIECAD; ISSN: 0095-9014
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB cf. C. A. 34, 6104.2. The mixture of methyl 9,12- and 9,11-octadecadienoates obtained by metholysis of dehydrated castor oil was heated 6 hrs. at 300° in CO2 and then distilled at 1 mm. at this temperature; 54.6% of a viscous, pale yellow, polymeric residue was left. This gave, after 2 fractionations in a mol. still at 1 micron and 160-290°, a dimer (I), nD25 1.4768, d425 0.9346 and a trimer (II), nD25 1.4836, d425 0.9474. Saponification and I nos., mol. weight, mol. refraction,
etc., of I indicate a dimethyl ester of 5,6-dihexyl-3-cyclohexene-1-(9-decenoic acid)-2-octanoic acid or 5-hexyl-6-(7-octenyl)-3-cyclohexene-1,2-dioctanoic acid, formed by the 1,2-1,4 addition of the conjugated double-bond systems of the octadecadienoic acid as in the formation of vinylcyclohexene from butadiene. It is suggested that II is a tricarboxylic octahydrobiphenyl derivative There is no evidence of the formation for higher polymers. All data support the theory that the polymerization of drying oils depends upon the reaction of conjugated diene structures along the lines already established for butadiene.
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	273.96	348.63
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-19.14	-22.62

FILE 'STNGUIDE' ENTERED AT 09:12:38 ON 03 MAR 2011
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Feb 25, 2011 (20110225/UP).

=> d his

     (FILE 'HOME' ENTERED AT 08:19:24 ON 03 MAR 2011)

     FILE 'REGISTRY' ENTERED AT 08:19:37 ON 03 MAR 2011
               E 9,11,10,12-CONJUGATED LINOLEIC ACID/CN
               E 9,11 (OR 10,12)-OCTADECADIENOIC ACID METHYL ESTER/CN
               E 9,11,10,12-OCTADECADIENOIC ACID/CN
               E 9,11-OCTADECA-10,12-DIENOIC ACID/CN
               E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
               E 9,11(OR 10,12)-OCTADECADIENOIC ACID METHYL ESTHER/CN
               E 9,11(OR 10,12)-OCTADECADIENOIC ACID ETHYL ESTER/CN
L1             1 S E3

     FILE 'CAPLUS' ENTERED AT 08:34:43 ON 03 MAR 2011
L2             1 S L1/PREP
L3             0 S 9,11-OCTADIECADIENOIC ACID METHYL ESTER
L4            26 S 9,11-OCTADECADIENOIC ACID METHYL ESTER
L5             1 S L4 AND (PRUIFY OR PURIFICATION)

     FILE 'STNGUIDE' ENTERED AT 08:40:20 ON 03 MAR 2011

     FILE 'CAPLUS' ENTERED AT 08:47:14 ON 03 MAR 2011
L6            16 S 10,12-OCTADECADIENOIC ACID METHYL ESTER
L7             0 S L6 AND (PURIFY OR PURIFICATION)
L8             6 S 9,11-OCTADECADIENOIC ACID ETHYL ESTER
L9             0 S L8 AND (PURIFY OR PURIFICATION)
L10            0 S 10,12-OCTADECADIENOIC ACID ETHYL ESTER
L11          122 S ((THIN (A) FILM) OR (WIPED (A) FILM)) (S) (RECTIFICATION OR F
L12            0 S (L4 OR L6 OR L8) (L) ((THIN (A) FILM) OR (WIPED (A) FILM))
L13         2272 S MOLECULAR (A) DISTILLATION
L14            0 S (L4 OR L6 OR L8) (L) L13
L15            0 S L6 AND L13
L16            0 S L6 AND (MOLECULAR (A) DISTILLATION)
L17            0 S 9,11-OCTADECADIENOIC ACID ALKYL ESTER
L18            0 S 10,12-OCTADECADIENOIC ACID ALKYL ESTER
L19            0 S 9,11-OCTADECADIENOIC ACID BUTYL ESTER
L20          473 S 10,12-OCTADECADIENOIC ACID
L21          622 S 9,11-OCTADECADIENOIC ACID
L22            1 S L21 (S) (ALKYL (4A) ESTER)
L23            1 S L20 (S) (ALKYL (4A) ESTER)
L24            1 S L20 (L) (ALKYL (2A) ESTER#)
L25            0 S L24 NOT L23
L26            1 S L21 (L) (ALKYL (2A) ESTER#)
L27            0 S L26 NOT L22
L28            4 S (L20 OR L21) AND (MOLECULAR (2A) DISTILLATION)
L29            0 S (L20 OR L21) AND (FRACTIONATING OR RECITIFICATION)
L30           27 S (L20 OR L21) AND DISTILLATION
L31            6 S L30 AND (FRACTIONATION OR FRACTIONATING)

     FILE 'STNGUIDE' ENTERED AT 09:12:38 ON 03 MAR 2011

=> log off
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ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF
LOGOFF? (Y)/N/HOLD:y
STN INTERNATIONAL LOGOFF AT 09:16:01 ON 03 MAR 2011